IN THE CLAIMS

1.(Currently Amended) Method for representing a sequence of pictures grouped in sets of at least two successive pictures, called GOPs, a textured, meshed three-dimensional model being associated with each of said GOPs, ~~wherein~~the method comprising:

representing the three-dimensional model associated with the GOP of level n ~~is represented~~ by means of an irregular mesh taking account of at least one vertex of at least the irregular mesh representing the three-dimensional model associated with the GOP of level n-1, said vertex being called common vertex.

2.(Currently Amended) Method ~~of representation~~for representing according to claim 1, wherein at least two consecutive three-dimensional models also have, associated with them, a basic model, built from said vertices common to said at least two three-dimensional models.

3.(Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 and 2~~claim 2, wherein ~~the~~ passage from one of said three-dimensional models to another is done by wavelet transformation, using a first set of wavelet coefficients.

4. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 3~~claim 3, wherein one of said three-dimensional models is obtained from said associated basic model by wavelet transformation, using a second set of wavelet coefficients.

5. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 4~~claim 1, wherein said irregular mesh of level n is a two-dimensional irregular mesh of one of the pictures of said GOP of level n.

6. (Currently Amended) Method ~~of representation~~for representing according to claim 5, wherein said meshed picture is the first picture of said GOP of level n.

7. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 6~~claim 1, wherein each of said three-dimensional models is obtained by elevation of said irregular mesh representing it.

8. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 5 to 7~~claim 5, wherein said irregular two-dimensional mesh is obtained by successive simplifications of a regular triangular mesh of said picture.

9. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 5 to 7~~claim 5, wherein said irregular two-dimensional mesh is obtained from a Delaunay mesh of predetermined points of interest of said picture.

10. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 9~~claim 1, wherein two successive GOPs have at least one common picture.

11. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 10~~claim 1, wherein said vertices common to said levels n-1 and n are detected by estimation of motion between the first picture of said GOP of level n-1 and the first picture of said GOP of level n.

12. (Currently Amended) Method ~~of representation~~for representing according to claim 11, wherein it includes ~~a step for the storage of~~storing said detected common vertices.

13. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 1 to 12~~claim 1, wherein said

irregular mesh representing said model associated with the GOP of level n also takes account of at least one vertex of at least the irregular mesh representing the model associated with the GOP of level n+1.

14. (Currently Amended) Method ~~of representation~~for representing according to ~~any of the claims 4 to 13~~claim 4, wherein said second set of wavelet coefficients is generated by the application of at least one analysis filter on a semi-regular re-meshing of said associated three-dimensional model.

15. (Currently Amended) Method ~~of representation~~for representing according to any of the ~~claims 3 to 14~~claim 3, wherein said wavelets are second-generation wavelets.

16. (Currently Amended) Method ~~of representation~~for representing according to any of the ~~claims 3 to 15~~claim 3, wherein said wavelets belong to the group comprising:
- piecewise affine wavelets;
- polynomial wavelets; and
- wavelets based on the Butterfly subdivision scheme.

17. (Currently Amended) ~~Signal~~A signal representing a sequence of pictures grouped in sets of at least two successive pictures called GOPs, a textured, meshed three-dimensional model being associated with each of said GOPs, wherein ~~it~~the signal comprises:

at least one field ~~containing~~comprising a basic model built from vertices common to at least two irregular meshes, each representing a three-dimensional model, said at least two three-dimensional models being associated with at least two successive GOPs;

at least one field ~~containing~~comprising a set of wavelet coefficients used for the construction, by wavelet transformation from said basic model, of at least one three-dimensional model associated with one of said

GOPs ;

at least one field ~~containing~~comprising at least one texture associated with one of said three-dimensional models; and

at least one field ~~containing~~comprising at least one camera position parameter.

18. (Currently Amended) ~~Device~~A device for representing a sequence of pictures implementing the representation method of ~~any of the claims 1 to 16~~claim 1.

19. (Currently Amended) ~~Device~~A device for representing a sequence of pictures grouped in sets of at least two successive pictures, called GOPs, a textured, meshed three-dimensional model being associated with each of said GOPs~~. wherein it~~, wherein the device comprises:

means for the building of said three-dimensional models by wavelet transformation of at least one basic model, prepared from vertices common to at least two irregular meshes representing two successive three-dimensional models; and

means for representing said pictures of the sequence from said three-dimensional models, from at least one picture of texture and from at least one camera position parameter.

20. (Currently Amended) ~~Device~~A device for the encoding of a sequence of pictures grouped in sets of at least two successive pictures, called GOPs, a textured, meshed three-dimensional model being associated with each of said GOPs, wherein ~~it~~the device comprises:

means for the encoding of a three-dimensional model associated with the GOP of level n, said three-dimensional model being represented by means of an irregular mesh taking account of at least one vertex of at least one irregular mesh representing the three-

dimensional model associated with the GOP of level n-1.

21. (New) Method for the encoding of a sequence of pictures grouped in sets of at least two successive pictures, called GOPs, a textured, meshed three-dimensional model being associated with each of said GOPs, wherein the method comprises encoding a three-dimensional model associated with the GOP of level n, said three-dimensional model being represented by means of an irregular mesh taking account of at least one vertex of at least one irregular mesh representing the three-dimensional model associated with the GOP of level n-1.